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# Environmental Protection Procedure

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## Insect Nuisance Investigation

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## 1. The Clean Neighbourhoods and Environment Act 2005

1.1 Section 101 adds to the descriptions of statutory nuisances listed in section 79(1) of the Environmental Protection Act 1990:

***'(fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance'***

This provision does not apply to insects from domestic premises or to insects listed in Schedule 5 to the Wildlife and Countryside Act 1981, unless they are included in that Schedule solely to prevent their trade or sale.

1.2 This measure is intended to provide local authorities with a remedy to nuisances from insect infestations (whether naturally occurring or caused by human activities) arising from 'relevant' industrial, trade or business premises. However, it is not meant to be used against most naturally occurring concentrations of insects on open land or in ways that would adversely affect biodiversity.

1.3 Accordingly, subsection (5) inserts two new subsections (7C) and (7D) into section 79 of the Environmental Protection Act 1990 which exclude from the definition of 'relevant' industrial, trade and business premises:

- (a) Land used as arable, grazing, meadow or pasture land (but not structures placed on the land),
- (b) Land used as osier land, reed beds, or woodland,
- (c) Land used for market gardens, nursery grounds or orchards,
- (d) Land forming part of an agricultural unit (but not covered by (a) to (c)) and which is of a description specified in regulations,
- (e) Land included in a Site of Special Scientific Interest, and land covered by, and the waters of, rivers, watercourses (except sewers and drains), lakes and ponds.

1.4 Land which falls under (d) above is described by regulations. These regulations prescribe the descriptions of land under s.79(7C)(d) of the Environmental Protection Act 1990 (introduced by s.101(5) of the Clean Neighbourhoods and Environment Act 2005), that form part of an agricultural unit and which are (in addition to the types of land already listed at s.79(7C) (a)-(c)) to be exempt from 'relevant industrial etc. premises' from which the new statutory nuisance from insects (s.79(1)(fa) Environmental Protection Act 1990) is capable of emanating. Certain types of land are exempted from being capable of statutory nuisance from insects in order to safeguard endangered species, and protect biodiversity.

## **2. Assessing complaints of nuisance**

2.1 Statutory nuisance from insects follow the same regime as for other statutory nuisances. That is, it is initially for an officer from Environmental Health to assess on the evidence available whether or not a statutory nuisance exists, or may occur or recur, on a case-by-case basis. Not least because it will depend on their effects, there are no objective and set levels of insect infestation above which a statutory nuisance is or may be caused, and below which it is not.

2.2 'Nuisance' is not defined in statute, but is rather based on the common law concept of what is to be regarded as an unreasonable interference with someone's use of their own property. Alternatively, a statutory nuisance may be something that is 'prejudicial to health' and, ultimately, it will be for the courts to decide whether a statutory nuisance exists. As for all statutory nuisances, when assessing a case an officer should take account of a range of factors including:

- Duration
- Frequency
- Impact – i.e. material interference with use of property or personal wellbeing; actually or likely to be adverse to health
- Local environment
- Motive – i.e. unreasonable behaviour or normal use
- Sensitivity of the person(s) affected – statutory nuisance relies on the concept of the average person, and is not designed to take account of unusual sensibilities

2.3 Enforcement should be reasonable and proportionate. If, however, the officer is satisfied that a statutory nuisance exists, or may occur or recur, an abatement notice must be issued requiring that the nuisance cease or be abated within a set timescale. The notice may (and in this case should) specify works or actions to be taken.

## **3.0 Likely sources of insect nuisance**

3.1 It is expected that the following sources will generate most complaints of insect nuisance:

- Poultry houses / farms (buildings on agricultural land are not exempt from statutory nuisance from insects, even though the land surrounding them may be)
- Sewage treatment works
- Manure / silage storage areas
- Animal housing
- Stagnant ditches and drains (i.e. containing putrid and anoxic water) (provided they are on relevant industrial etc. premises)
- Landfill sites / refuse tips
- Waste transfer premises
- The commercial parts of mixed commercial / residential blocks of buildings (i.e. excluding the residential premises contained therein)
- Trade or business premises (e.g. contaminated goods, kitchen areas)
- Slaughterhouses
- Used car tyre recycling businesses

Local authorities have a duty, however, to take reasonable steps, where practicable, to investigate any complaints of insect nuisance. After all the vast majority of situations being investigated will be resolved by negotiation without recourse to formal actions.

3.2 It is probable that complaints will be received about insects from domestic premises. As indicated above, insects emanating from domestic premises are not covered by this extension of the statutory nuisance regime. Any problems caused by insects from domestic premises may, however, be capable of being dealt with under section 79(1)(a) of the Environmental Protection Act 1990 – ‘any premises in such a state as to be prejudicial to health or a nuisance’.

This limb might be appropriate if, for example, the state of a domestic dwelling was such that it encouraged an infestation of insects that constituted a nuisance to neighbouring dwellings.

#### **4. Assessing if a business is the source of insects**

What to look for when deciding if a business is a source of insects.

The investigating officer will look for evidence of large numbers of larvae, pupae and/or flies. They will also make note of bad practices, rubbish, rotting matter, wet manure, etc etc, and action that has or has not been taken to address the situation. It is likely that if flies are in such number at residences to cause nuisance there will be a substantial breeding ground nearby.

#### **5. Best Practicable Means defence**

The defence of ‘best practicable means’ has been extended to insect nuisance from industrial, trade or business premises. BPM will be different for each site and may require expert guidance e.g an entomologist. BPM may include; insect monitoring, recording of insecticide usage, use of appropriate treatments at appropriate times, dry manure etc etc. The potential for a BPM defence must be considered when drafting schedules, and at prosecution stage the potential for a defence of “Reasonable Excuse” must be anticipated.

#### **6. Assessing complaints of insect nuisance**

6.1 Ascertaining the source of insect nuisance can sometimes be a difficult and lengthy process. There may be a temptation for some people to ascribe insect nuisance to businesses by virtue of them being likely sources. A participatory approach to determining the source is likely to help satisfactory outcomes.

6.2 Proper management and treatment programmes should be able to minimize most insect nuisance cases that arise. It is essential for operators to recognise infestations in their early stages and to try and keep them under control.

6.3 Officers should map all residences affected by nuisance and all potential sources within a 1km radius.

## 7. Insect Nuisance

7.1 The vast majority of insect species do not cause a nuisance, but are essential components of biodiversity and maintain ecosystems through pollination, soil maintenance and other functions.

7.2 There are also a number of insect species which can cause nuisance in sufficient quantities, or seasonally. Some may also pose a public health risk, although they may not be regarded as a public health pest in terms of environmental legislation, or a risk in animal husbandry. Such insects include mosquitoes (Culicidae), house flies (*Musca domestica* Linnaeus), lesser house flies (*Fannia canicularis* (Linnaeus)), and stable flies.

Examples of nuisance insect species, their prevention and their control can be found in the CN&E Act guidance.

7.3 There is a difference between insects arising from an activity on a business, trade or industrial premises, and natural occurrence of insect populations. It is not the intention for this measure to cause environmental damage to the ecosystem or biodiversity.

7.4 It should not be assumed that killing insects is necessarily the most appropriate way to cease or abate a nuisance.

7.5 One of the intentions behind the measure to introduce insect statutory nuisance is to capture statutory insect nuisance caused as a result of activity on premises, where control through the existing limb of 'any premises in such a state as to be prejudicial to health or a nuisance' or "accumulations and deposits" would not be appropriate.

7.6 Another intention is to control statutory insect nuisance at source, where such control will not cause unacceptable damage to the environment or biodiversity. If activity and conditions attract or provide breeding conditions for insects to such an extent that they constitute a statutory nuisance, then it is the activity and conditions which the officer should address.

7.7 Environmental consequences – indirect as well as cumulative – of remedial action must be considered, such as the effects of insecticides, if used, on the environment, nature, bodies of water, etc. Insecticides should therefore be chosen with care and regard should be given to the Pesticides Safety Precautions Scheme in their use.

7.8 An abatement notice once issued may be 'simple' and require abatement within a specified timescale. Alternatively, it may, but does not have to, specify works or other steps necessary to abate the nuisance or restrict its occurrence or recurrence.

## **8. Environmental impact**

8.1 Insects rarely cause a significant health risk, and health risks where they do or may exist are often associated with human habitation and waste, so significant damage to the environment should not occur. Environmental management should be the first option.

8.2 Any mitigating treatment should take account of factors including impact on health and well being; impact on the target and non-target species; impact on the environment including ground and water source contamination; cost; and efficacy. Treatments must be applied in accordance with manufacturer's instructions, and residues cleared up and properly disposed of. Chemicals used should be alternated in order to reduce the potential for resistance build up.

## **9. Investigation Procedure**

1. Enquiry received – Discuss the issue with the complainant to ascertain likely species, an estimate of the number of flies, their habits and impact on them. If necessary request that samples are submitted for identification – these might be a whole range of flies including cluster flies, stable flies, house flies and bluebottles. Give advice regarding treatment and control (if appropriate). Many of our enquiries complete at this point (estimate 50%).
2. If the problem is persistent and the complaint is about significant numbers of houseflies (as these are of public health significance because of their habits) – visit the complainant, collect samples, take photos if appropriate. Request that the complainant monitors until numbers drop. Give advice regarding control measures they can use within their properties. The Government has published guidance that suggests that flies might become a nuisance in people's homes when there are just 5 or more in a room at the same time. We are familiar with rural and farming communities and we take the view that in this area it is reasonable to regard "significant" numbers as 20 or more flying around a room at any time (this is 4 times the number suggested by DEFRA's advisers), or more than 50 collected on a sticky fly paper over 1 week. Our research over the past 3 years shows that these numbers and above are in excess of anything that might be considered "normal" even in the countryside. The complaints that we investigate in detail usually involve flies in numbers of many hundreds a week within homes (usually kitchens) – and that in our view is likely to amount to a statutory nuisance.
3. Complainants should hang sticky papers in an agreed location and change them every week until asked to stop. The Officer must collect the papers, and identify and count the flies. The officer should photograph the fly paper in situ before removing it. The photo must be date marked. It is very important that peaks and troughs in fly numbers are recorded as these might relate to activities taking place at the fly breeding grounds and therefore help make the "causal link". Sticky papers are then fixed to white paper and a label attached with details of location, dates, flies and numbers. A second photograph must then be taken of this paper.
4. If the complaint concerns significant numbers of houseflies, identify potential breeding grounds in the area. Again our research over the past 3 years shows that in every case of persistent and significant numbers of houseflies there is a corresponding breeding ground found within a nearby free range egg producing poultry shed. We do not receive complaints about persistent significant numbers of houseflies from residents living near to other intensive

farms, dairy farms, pig farms, stables or from people in the countryside living near ditches or compost heaps. (Although we sometimes receive complaints from residents living near to dairy or pig farms the flies are not usually at nuisance levels).

5. Contact farmers who may be experiencing problems in their sheds. Arrange to visit to ascertain whether there are houseflies and larvae within the sheds. Discuss with farmer and provide assistance, guidance and best practice information if required. In most cases the farms are already aware of a problem and taking action to resolve the issue. Identify with the farmer the root cause(s) of the problem and agree improvements which will ensure that the infestation will not recur. Advise the farmer of the level of nuisance being experienced in nearby residences. Make a note of flock information and dates on the monitoring sheet (attached to this procedure).
6. If appropriate examine the manure throughout the shed by looking for wet areas. Take samples of the manure and examine for the presence of larvae and pupae. Note the presence of flies in the pits and take photographs. If treatment is working there will be piles of dead flies near bait boards, insectocutors or near exit points. Note the presence of flies in the egg packing room, particularly on sticky papers. It is usual to see up to 20 flies on a sticky paper in a week, or perhaps 1 or 2 larvae in a trowel full of manure. Any higher numbers suggest a problem occurring which isn't being effectively treated. Ensure that farmers change their sticky papers each week on a regular day regardless of fly numbers to ensure consistent monitoring, and that they record numbers.
7. Discuss with the residents affected the action taken by Officers and farmer, advising that treatment is likely to take several weeks to be fully effective. Residents should continue to monitor until otherwise advised.
8. Revisit the farm within 2 weeks if the problem persists, or to assess the effectiveness of control measures.
9. If action taken by the farmer is inadequate or ineffective, the officer must continue to work with them giving advice and assistance, as a resolution of the problem is preferable to enforcement action. However in the event of continuing problems formal action must be considered.
10. Where there are regular problems with a farm, it is very useful to know when there are no problems as well as when there are large numbers of flies. These "ups and downs" over a season or successive years can be linked to activities in the sheds and may become essential information if you have to prove the link between the breeding ground and the residences. Shed activities include downtime, new flocks, clearing manure, and using effective treatments.
11. Once resolved, advise all parties of the outcome of the investigation, action taken and proposals to avoid a recurrence. Advise complainants to contact again if problems recur.



## **FLY MONITORING AND COUNTS**

### **GUIDANCE FOR COMPLAINANTS**

In order for us to obtain the evidence we require for an investigation into fly nuisance under the Environmental Protection Act, we need to obtain information from the complainants which will demonstrate the level of infestation. In order for an infestation to be determined as a statutory nuisance, it must be severe and over and above what we would normally expect in an agricultural area.

We need complainants to provide information for us in some or all of the following ways:

1. Place hanging fly papers in kitchens and living rooms, or outside in a porch or garage in order that we can collect flies to identify. Note the date that the strip was hung up and leave for 1 week. We will revisit to photograph the strip in situ and take it away to identify the flies on it. Where a local infestation is severe, the papers are likely to fill up within one or two days but in order for us to show consistent monitoring they must be left for 1 week - use more than one paper if necessary. Replace the paper on the same day each week.
2. Take photographs of substantial numbers of flies on
  - a) Fly papers
  - b) Fly catchers
  - c) Surfaces

Again the start and end dates must be noted

In order for this evidence to be admissible the person submitting the information must sign any paperwork or photos as a true and accurate record.

We know that some people are reluctant to use fly papers, fly sprays or the red top fly catchers but these are the best ways to deal with the flies whilst the problem is occurring, and also the best ways of obtaining fly bodies for us to use as evidence.

The information will be collated with that submitted by other complainants, and any data collected by ourselves. Our investigations include trying to identify the type of fly and source of it, and visiting the source to determine the cause of the infestation and remedial action required to resolve the problem. We will also visit other potential sources to discount them, and may also carry out background monitoring to determine the "normal" variety and level of flies in your area.



# Farm Inspection Sheet

Date: \_\_\_\_\_

Officer: \_\_\_\_\_

Farm Name & Address: \_\_\_\_\_

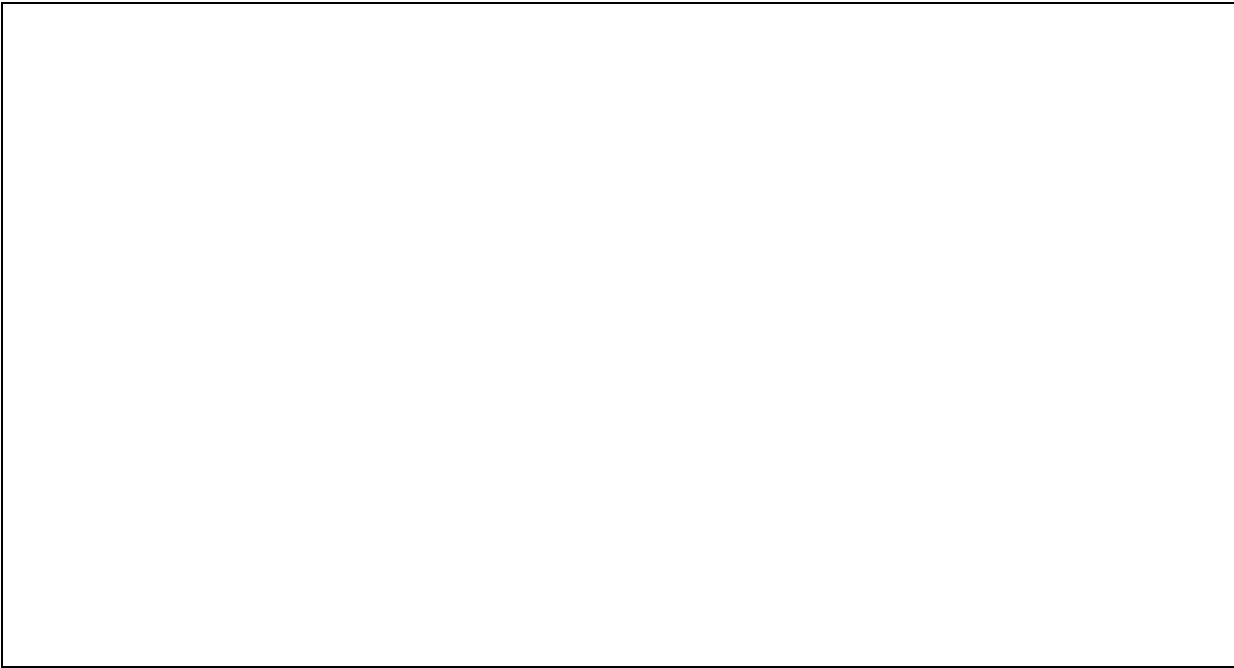
Shed Number/Name			
Flock In/Age			
Flock Out			
Size of Flock			
Flies (0-10)			
Manure Dryness (0-5)			

Control Measures:

Shed Number/Name			
Monitoring Methods			
Larvicides (Product & When Used)			
Adulticides (Product & When Used)			
Other Control Methods (EFK's etc)			

Agreed Action Required & Additional Notes (Continue overleaf as necessary):

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Manure Storage / Disposal Arrangements (Specific Location)

A large, empty rectangular box with a thin black border, located below the section header. It is intended for a detailed description or drawing of the manure storage or disposal arrangements at a specific location.

Photo's taken  On file or Saved to \_\_\_\_\_

Officer Signature: \_\_\_\_\_ Print Name: \_\_\_\_\_

On behalf of Farm : \_\_\_\_\_ Print Name: \_\_\_\_\_